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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/314,058 05/18/99 LEMAN

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COE F MILES
TROP PRUNER HU & MILES PC
8554 KATY FREEWAY
STE 100
HOUSTON TX 77024

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EXAMINER

EISEN, A

ART UNIT

PAPER NUMBER

2674

DATE MAILED:

05/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/314,058

Applicant(s)

LEMAN, MICHAEL V.

Examiner

Alexander Eisen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 8-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

This communication is in response to amendment filed on 05 March 2001.

The status of the claims is the following:

Claims 1-7 have been cancelled by the Applicant.

Claims 8, 13, 14, 16, 17 and 19 have entered as amended.

Claims 21-25 have been added.

Claims 8-25 are pending in the current Application claims 8, 16 and 21 are independent claims.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 8-25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation in the claim 8 “the second display adapted to accept input from a pen-type input device for at least handwriting recognition” does not have basis in the original disclosure and introduces a new matter.

The negative limitation in the claim 16, “the raster image display is not capable of receiving input from a pen-type input device” does not have basis in the original specification

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and thus fails to comply with the written description requirement. Any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere presence of a positive recitation is not the basis for exclusion. *See Exparte Graselli*, 231 USPQ 393 (Bd. Appl. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The limitation constitutes an undisclosed utility (or non-utility?), which would not be understood by one of ordinary skill in the art, since it is well known in the art that raster-type displays render themselves to be adapted for use with the light pen quite easily. Claim 20 additionally points out that “the raster image display element comprises the liquid crystal display element”, but it is well known in the art that liquid crystal displays are of a matrix type, which are not quite raster type, such as CRT, for example.

The newly added claim 21 cites limitation “the second display is foldable on both the first side and the opposite side of the first display”. The disclosure and all figures provide only one way to fold the second display, which is folding it around the hinge 112 as shown in FIG. 1 in the direction of the arrow 114. FIGS. 2 and 3 show the second display folded on the rear side of the first display. It would be clear to one of ordinary skill in the art that the offset of the hinge 112 as shown in FIGS. 1-3 would not allow the second display to be folded on the front side of the first display. Since no additional functionality or utility of such claimed feature is provided by the specification, nor its enablement is supported, the above limitation is confusing, renders claims 21-25 indefinite, and clearly raises a new matter issue.

Claims 24 and 25 additionally raise a new matter issue by citing limitation that were not disclosed in the original specification, such as “handwriting” and “electrical conductors”.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-15 are Lin, US Patent No. 6,094,341, in view of Harada et al. ("Harada"), US Patent No. 6,072,476 and further in view of Kuno et al., ("Kuno"), US 5,467,102. Lin discloses a computer system comprising a base unit (2), which is pivoted with a first display (21), and the first display is pivoted with the second display (22). Lin does not disclose, however, that either of the displays is adapted to accept input from a pen-type device adapted for a handwriting recognition, or that the first and second displays may be positioned to form a pen-based tablet, or may be configured as a single large display. Harada teaches an image display device (51) comprising a main body having a display unit with a first display (54-1) and a second display (54-2), which can be used separately or as one dual-screen integral display (column 2, line 14). The second display is attached to the side of the first display by a hinge (59) and is able to accept the input from a pen-like device (column 22, lines 31-37). Both Lin and Harada teach that the first and second display can be of a LCD type display. None of the above references teach that a pen input device is used in conjunction with a handwriting recognition feature of the tablet. Kuno describes a portable display device having a structure very close to that of Harada's and teaches that a handwriting recognition of a pen input device (see FIG. 17, column 11, line 13-25). It would have been obvious to one of ordinary skill in the art at the time when the invention was made to implement in the folding dual-screen notebook computer of Lin features taught by

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Harada, such as pen input and usage of two displays as a single large display, because the benefits of using pen input devices, such as small size and the ability to input data by handwriting in portable computer devices as taught by Kuno, and using two smaller displays as an integral single one would allow to display larger and more detailed images and thus to improve the display quality of portable device.

5. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Harada. Lin discloses a computer system comprising a base unit (2), which is pivoted with a first display (21), and the first display is pivoted with the second display (22). Lin does not disclose, however, that either of the displays is adapted to accept input from a pen-type device or that the first and second displays may be positioned to form a pen-based tablet, or may be configured as a single large display. Harada teaches an image display device (51) comprising a main body having a display unit with a first display (54-1) and a second display (54-2), which can be used separately or as one dual-screen integral display (column 2, line 14). The second display is attached to the side of the first display by a hinge (59) and is able to accept the input from a pen-like device (column 22, lines 31-37). Both Lin and Harada teach that the first and second display can be of a LCD type display. It would have been obvious to one of ordinary skill in the art at the time when the invention was made to implement in the folding dual-screen notebook computer of Lin features taught by Harada, such as pen input and usage of two displays as a single large display, because the benefits of using pen input devices, such as small size and the ability to input data by handwriting, are well known in the art of portable computer devices, and using two smaller displays as an integral single one would allow to display larger and more detailed images and thus to improve the display quality of portable device.

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As to negative limitation, that a raster image display is not capable of receiving input from a pen-type input device, Lin discloses display, which is obviously not capable of receiving input from a pen-type input device, while Harada's both displays are capable of receiving input from a pen-type input device. It would have been obvious to one of ordinary skill in the art at the time when the invention was made to make only one display with a pen input capability depending on actual needs and requirements, since it simplifies the manufacturing and make the whole device more economically realized.

6. Claims 21-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Kuno. Lin discloses a computer system comprising a base unit, which is pivoted with a first display, and the first display is pivoted with the second display. Lin does not disclose, however, that either of the displays is adapted to accept input from a pen-type for at least one of handwriting signatures, or that the first and second displays may be positioned to form a pen-based tablet, or that the first display may be folded on both sides of the second display. Kuno teaches that a first display can be folded on both sides of the second display (see FIGS. 2A and 2B), displays are adapted to handwriting recognition. It would have been obvious to one of ordinary skill in the art to use the arrangement of Kuno in the display device of Lin, because it conveniently lend itself to positions when neither of display are used and stored in protective way, or when only one of displays is to be used as a tablet, when there is no necessity to view a larger picture, which requires both displays.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Kuno and further in view of IBM Technical Disclosure Bulletin, February 1992, Volume 34, Issue 9, pp. 29-32, which describes a conductive hinge connector for laptop computer. It would

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have been obvious to one of ordinary skill in the art to incorporate teachings of IBM in the display device of Lin modified by the teachings of Kuno, because it provides the adequate solution to power delivery for hinged parts of the display device.

Response to Arguments

8. Applicant's arguments filed on 05 March 2001 have been fully considered but they are not persuasive and also, since they are mostly directed to amended claims, they are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Batio, US 5,949,643, discloses a portable computer having a composite display, which is pivotally attached to a main body, and a pen type input device.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (703) 306-2988. The examiner can normally be reached on M-F (8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on (703) 305-4709. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.



Alexander Eisen
May 9, 2001



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600